

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 16 and 17 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims necessitated the new grounds of rejection. However, the same references applied in the last Office Action are being applied below. The Applicant argues that the Examiner failed to identify required reasoning from the base reference that would prompt the combination of the inventions of Murren and Marks. When viewing MPEP 2144 (I), the Examiner interprets this as the rationale in combining prior art can come from the prior art itself, explicitly or implicitly, generally available knowledge of one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. The prior art can be either the base or secondary reference, but in this case, since the feature of multi-casting is introduced by Marks, the Marks reference contains the reasoning as to the need for the combination (e.g. in order to offer the multicasting technique to improve the efficiency of transmission of documents within the Murren reference as mentioned in paragraph [0003] of Marks). Therefore, the Examiner maintains the rationale of the combination in view of the secondary reference Marks and the rationale based on the secondary reference is not impermissible hindsight since the rationale was not gleaned from applicant's disclosure.

Regarding the print-ready document argument, again the Examiner maintains the rejection of the claims in view of the above references and the background of Applicant's invention. Again, in the Murren reference, the invention discloses sending

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hard copy flyers to users who subscribe to such information in order to inform them about a product. With the combination of the background of Applicant's invention, this prevents the user from having to purchase or download different types of conversion or decomposition software for the document in order to be printed by a user's printer right away. Foregoing the need to acquire appropriate or updated drivers for conversion or decomposition saves the user time and prevents waste of other resources. Therefore, in view of the above explanation with the combination of the above references, the rejection is maintained.

Lastly, regarding the newly added claim feature, the Examiner still believes that the claim limitation is disclosed. The Applicant's claim limitation does not require multicasting throughout the whole communication schema. It only requires this communication method when communicating to subscribers. What is described in paragraph [0002] of Marks is a system that responds to users in a multicasting response. This is similar to Applicant's own invention. When one person in the claimed invention subscribes to a subject, this is considered as one-to-one contact with the communication equipment. However, the response of sending out a document is one to many since others are also interested in the same subject or document. The reference of Marks still performs this feature by the very paragraph mentioned in Applicant's arguments. A multicast response is a one to many point communication method with subscribers and this is clearly disclosed in paragraph [0002], [0007]-[0009]. Since the claim language clearly discloses multicast communication when communicating to subscribers, not from subscribers, and the Marks reference performs this claim feature,

the Examiner maintains the rejection of the claims with the previously applied references.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murren '085 (US Pub No 2003/0110085) in view of Marks '374 (US Pub No 2002/0007374) and the background of the invention.

Re claim 1: Murren '085 discloses maintaining synchronization of information published to multiple subscribers, comprising:

publishing document library subject availability via multicast communication over a data network (i.e. in the system of Murren '085, the tracking component (106) publishes the availability of information within a subscribers criteria via a publishing component (110). This is not only given to a certain user, but to multiple users requesting the information. When updates occur to information within the user's criteria, multiple users' are notified by the publishing of the information to the users. Publishing is interpreted as the dissemination of information to the public. Since the updates and the requesting of information within a user's criteria occurs over a network that notifies

multiple user's at the same time, the system is considered to perform multicast communication, which is when multiple clients receive the same information from one server; see fig. 1; paragraphs [0006]-[0025])

wherein said subject availability is predefined (i.e. in the system of Murren, the different keywords or items available online have a predetermined length of time that the items are to be subscribed to by a subscribers. Also, the actual information that is used to identify the item is predetermined; see ¶ [0016]-[0025]);

receiving subscriptions for document library subjects via point-to-point data communication over the data network from remote subscribers at individual sites (i.e. the subscribers (104) in the overall system support the World Wide Web and web pages. The subscribers can be considered a site since they receive information using the Internet and the system automatically sends information to the designated user using the web and web pages. The subscriber is able to subscribe to the system (102) to receive different types of information from the publication and tracking systems. This information is received on the network used in the overall system to the subscribers at their respective locations on the network. The information received is information regarding the subject matter that fits inside the subscribers desired criteria. The information relating to the subscribers criteria and information related to other criteria, or subjects, are stored on the system (102); see fig. 1; paragraphs [0006]-[0025])

wherein said subscriptions comprise a configuration file that functions as a lookup table for subjects subscribed to by said subscribers (i.e. in a lookup table, a value that is input yields a value that is output. Within the Murren reference, the user

inputs in a criteria, whether that criteria involves multiple subjects or one subject, and with the input of this criteria, the system maps this criteria to items that correspond with this criteria. In addition, the system maps the user to the information that is requested through the listed criteria. Therefore, with the user being associated with the subjects requested and the subjects being associated with the input criteria, the above feature is performed; see fig. 6, ¶ [0020]-[0025] and [0048]-[0052]);

maintaining a records of subscriber data, subject data and publication-subscription logs utilizing a publish-subscribe middleware wherein said publish-subscribe middleware enables at least one server and at least one database to operate together for management of said records (i.e. the server (102) is used with the tracking component (106), which serves as a database, and these components maintain records of a subscriber (606) and a publication-subscriber log of multiple subscribers (608). The date range is considered the publication-subscriber log because the information lists the time a subscriber subscribes to a publication on the network. The item identifier is considered as subject data since this information identifies an item that is subscribed to. Also, in figure 5, the input criteria entered by the subscriber can be stored in a dedicated area of the publishing component (110), which is accessed by the server device (102). This information can be considered as subject data. Since the server (102) operates together with the information tracking component (106), which contains a database, that store the above types of information together, the system can be considered to have publish-subscribe middleware; see figs. 1-6, paragraphs [0047]-[0056]);

instantaneously, at time of repository change, synchronizing data representative of a document with remote subscribers at individual sites over the data network (i.e. once changes are made to the database storing the information regarding the interested subscribers, the information is propagated out, via the publication component (110) to the various subscribers (104) who may be affected by the change in information. All subscribers that are concerned with the information that is subscribed to be notified of the change in the information related to their criteria. The information relating to the criteria and with the multiple subscribers is synchronized with the subscribers since one of the improvements of this invention is to maintain synchronization of information publication to multiple subscribers; see fig. 1; paragraphs [0005]-[0025]); and

printing said document at said individual sites (i.e. in the system, the individual subscribers are able to make hard copy flyers of the information received from the network. Each subscriber represents a site in which the document is received; see ¶ [0023]).

However, Murren '085 fails to teach a data network using a multicast communication transport layer and wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment.

However, this is well known in the art as evidenced by Marks '374. Marks '374 discloses a data network using a multicast communication transport layer (i.e. it would have been obvious to one of ordinary skill in the art to combine the references of Murren and Marks since both involve the transmission of documents or other information to individuals subscribing to the information on a network (same field of endeavor). In the

system, the network operations center (130) contains a multicast server (390) that is able to send documents or files to directories on predefined local servers. The Internet protocol using the IP multicast protocols is considered as the multicast communication transport layer since the IP multicast protocols, like the claim feature, is used to send information from one point to many destinations on the network; see figs. 1 and 3; paragraph [0042]); and

wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment (i.e. in the system, a response to a unicast request is a multicast response to multiple users. If multiple users are associated with a document, then all of these users are contacted through the multicast communication method; see ¶ [0002] and [0007]-[0009]).

Therefore, in view of Marks '374, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a data network using a multicast communication transport layer and wherein communication is all accomplished via multicast to subscribers by publisher enterprise equipment, incorporated in the device of Murren '085, in order to have a one-to-many transmission protocols used in the transmission of data within the Murren '085 system (as stated in Marks '374 paragraph [0042]).

However, the references of Murren and Marks fail to teach print-ready document.

However, this is well known in the art as evidenced by the background of the invention. The background of the invention discloses print-ready document (i.e. in paragraph [005], the system contains workstations that are able to communicate

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information to be printed to a printing device. Since the background of the invention sends information over a network to other devices, then the background is viewed as similar to the other applied references above (same field of endeavor). Also, the background of the invention discloses already print formatted master documents that may be transmitted to a printer directly, which eliminates a need to repeat conversion and decomposition process of another copy if desired; see paragraph [0005]).

Therefore, in view of the background of the invention, it would have been obvious to one of ordinary skill at the time the invention was made to a print-ready document, incorporated in the device of Murren, as modified by the features of Marks, in order to eliminate the need to repeat the conversion or decomposition process if another copy of the document is needed or to save on processing resources of the received data (as stated in background of the invention paragraph [005]).

Re Claim 16: Murren '085 discloses a system for managing distributed multi-site Print Ready Document libraries comprising:

- at least one database (i.e. the information tracking component contains a database; see ¶ [0017]);

- at least one document library wherein documents are assigned to predefined topics stored within said at least one database (i.e. the documents are stored in the system and criteria used to describe the items on the database is predetermined before users are able to receive the subscribed to information; see ¶ [0016]-[0025]);



a data network configured to publish availability of said predefined topics to a plurality of print service sites wherein said print service sites subscribe to at least one of said predefined topics (i.e. in the system of Murren '085, the tracking component (106) publishes the availability of information within a subscribers criteria via a publishing component (110). This is not only given to a certain user, but to multiple users requesting the information. When updates occur to information within the user's criteria, multiple users' are notified by the publishing of the information to the users. Publishing is interpreted as the dissemination of information to the public. Since the updates and the requesting of information within a user's criteria occurs over a network that notifies multiple user's at the same time, the system is considered to perform multicast communication, which is when multiple clients receive the same information from one server. Also, since the sites that are used to receive the data are able to make hard copy flyers that are used to describe the published information, these sites can be considered as print service providers since they provide the service of printing to those located at the specific site; see fig. 1; paragraphs [0006]-[0025]) utilizing a configuration file conveyed over said data network (i.e. in a lookup table, a value that is input yields a value that is output. Within the Murren reference, the user inputs in a criteria, whether that criteria involves multiple subjects or one subject, and with the input of this criteria, the system maps this criteria to items that correspond with this criteria. In addition, the system maps the user to the information that is requested through the listed criteria. Therefore, with the user being associated with the subjects requested, the user

determines that the above feature is performed; see fig. 6, ¶ [0020]-[0025] and [0048]-[0052]);

at least one server configured to access said predefined topics stored within said at least one database (i.e. the information tracking and publication system is a server that accesses the different items within the subscribers predefined criteria or topics; see ¶ [0016]-[0022]);

enterprise communication equipment comprising a router and a network access device utilizing a communication transport layer configured to automatically send documents to said plurality of print service sites in accordance with said predefined topics that each of said plurality of print service sites subscribed to (i.e. in the system, the use of the internet and directing certain publications to certain users involves the clear use of a router and a device that accesses a network, such as a WAN or LAN. In the system, when a change has occurred to a document or when a new item has been placed on the database that fits within criteria or a topic that has been input by a user, the system automatically sends the documents within the input criteria to the sites of the subscribers. Once the subscribers receive this information, they may be able to print this information out and provide it to other users who are concerned with the published information. The Marks reference also discloses routers in paragraph [0029]; see ¶ [0023] and [0052]-[0054]);

publish-subscribe middleware configured to enable said at least one server to operate in conjunction with said at least one database in order to manage subscriber data, topic data and publication-subscription logs (i.e. the server (102) is used with the

tracking component (106), which serves as a database, and these components maintain records of a subscriber (606) and a publication-subscriber log of multiple subscribers (608). The date range is considered the publication-subscriber log because the information lists the time a subscriber subscribes to a publication on the network. The item identifier is considered as subject data since this information identifies an item that is subscribed to. Also, in figure 5, the input criteria entered by the subscriber can be stored in a dedicated area of the publishing component (110), which is accessed by the server device (102). This information can be considered as subject data. Since the server (102) operates together with the information tracking component (106), which contains a database, that store the above types of information together, the system can be considered to have publish-subscribe middleware; see figs. 1-6, paragraphs [0047]-[0056]);

at least one rendering device located at each of said print service sites configured to render said documents (i.e. in the system of Murren, a site is able to provide a hard copy of the subscribed to information and provide this hard copy to other concerned with this information. Since this information can be printed with a printing device, the subscribers contain rendering equipment used to output subscription information; see ¶ [0023]).

However, Murren '085 fails to teach network access device utilizing a multicast communication transport layer, wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment.

However, this is well known in the art as evidenced by Marks '374. Marks '374 discloses network access device utilizing a multicast communication transport layer (i.e. the references of Murren and Marks involve the transmission of documents or other information to individuals on a network (same field of endeavor). In the system, the network operations center (130) contains a multicast server (390) that is able to send documents or files to directories on predefined local servers. The Internet protocol using the IP multicast protocols is considered as the multicast communication transport layer since the IP multicast protocols, like the claim feature, is used to send information from one point to many destinations on the network; see figs. 1 and 3; paragraph [0042]),

wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment (i.e. in the system, a response to a unicast request is a multicast response to multiple users. If multiple users are associated with a document, then all of these users are contacted through the multicast communication method; see ¶ [0002] and [0007]-[0009]).

Therefore, in view of Marks '374, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of network access device utilizing a multicast communication transport layer, wherein communication is accomplished via a multicast to subscribers by publisher enterprise equipment, incorporated in the device of Murren '085, in order to have a one-to-many transmission protocols used in the transmission of data within the Murren '085 system (as stated in Marks '374 paragraph [0042]).

However, the references of Murren and Marks fail to teach print-ready document.

However, this is well known in the art as evidenced by the background of the invention. The background of the invention discloses print-ready document (i.e. in paragraph [005], the system contains workstations that are able to communicate information to be printed to a printing device. Since the background of the invention sends information over a network to other devices, then the background is viewed as similar to the other applied references above (same field of endeavor). Also, the background of the invention discloses already print formatted master documents that may be transmitted to a printer directly, which eliminates a need to repeat conversion and decomposition process of another copy if desired; see paragraph [0005]).

Therefore, in view of the background of the invention, it would have been obvious to one of ordinary skill at the time the invention was made to a print-ready document, incorporated in the device of Murren, as modified by the features of Marks, in order to eliminate the need to repeat the conversion or decomposition process if another copy of the document is needed or save on processing resources used in the system (as stated in background of the invention paragraph [005]).

Re Claim 17: The teachings of Murren '085 in view of Marks '374 and the background of the invention are disclosed above.

Murren '085 discloses the method of claim 16 further comprising instantaneously synchronizing data representative of the said document with said plurality of print service sites over the data network (i.e. in the system, the reference discloses

synchronizing data representative of the document subscribed to with a plurality of subscribers that are able to print the information received over the network. Since the subscribers are able to provide the service of printing the received information, the subscribers can be considered as printer service sites; see ¶ [0001], [0005] and [0016]).

However, the references of Murren and Marks fail to teach print-ready document.

However, this is well known in the art as evidenced by the background of the invention. The background of the invention discloses print-ready document (i.e. in paragraph [005], the system contains workstations that are able to communicate information to be printed to a printing device. Since the background of the invention sends information over a network to other devices, then the background is viewed as similar to the other applied references above (same field of endeavor). Also, the background of the invention discloses already print formatted master documents that may be transmitted to a printer directly, which eliminates a need to repeat conversion and decomposition process of another copy if desired; see paragraph [0005]).

Therefore, in view of the background of the invention, it would have been obvious to one of ordinary skill at the time the invention was made to a print-ready document, incorporated in the device of Murren, as modified by the features of Marks, in order to eliminate the need to repeat the conversion or decomposition process if another copy of the document is needed or save on processing resources used in the system (as stated in background of the invention paragraph [005]).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Barger '352 (US Pub No 2004/0003352) discloses a system where users' subscribe to activity regarding a document of interest and receive notifications when the document of interest is changed.
6. Vogt '349 (USP 6611349) discloses a system for printing and publishing that is able to transmit in the system a plate-ready file, which is used for printing a document using a plate. This is analogous to a print ready document as well.
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is

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(571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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